

3875081 G E SOLID STATE
Silicon Controlled Rectifiers

01E 17704 D T-25-13

C106 Series

File Number 1005

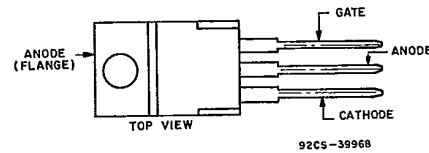
4-A Sensitive-Gate Silicon Controlled Rectifiers

For Power-Switching and Control Application

Features:

- 3.5-A(rms) on-state current ratings
- 20-A peak surge capability
- Glass-passivated chip for stability
- Formed-lead options available

TERMINAL DESIGNATIONS



JEDEC TO-220AB

The RCA-C106 series of sensitive-gate silicon controlled rectifiers are designed for switching ac and dc currents. The types within the series differ in their voltage ratings; the voltage ratings are identified by suffix letters in type designations.

These SCR's have microampere gate-current requirements which permit operation with low-level logic circuits. They

can be used for lighting, power-switching, and motor-speed controls, and for gate-current amplification for driving large SCR's.

All types in the series utilize the JEDEC-TO-202AB (RCA VERSATAB) plastic package.

MAXIMUM RATINGS, Absolute-Maximum Values:

	C106F	C106A	C106B	C106C	C106D	C106E	C106M	C106S	C106N	
V_{RRM} $R_{GK} = 1000 \Omega, T_C = -40 \text{ to } 110^\circ\text{C}$	50	100	200	300	400	500	600	700	800	V
V_{DRM} $R_{GK} = 1000 \Omega, T_C = -40 \text{ to } 110^\circ\text{C}$										A
$I_{T(AV)}$ ($T_C = 45^\circ\text{C}$)										A
$I_{T(RMS)}$ ($T_C = 45^\circ\text{C}$)										A
$I_{T(DC)}$ ($T_C = 70^\circ\text{C}$)										A
I_{TSM} For one cycle of applied principal voltage, $T_C = 45^\circ\text{C}$										A
60 Hz (sinusoidal)										A
50 Hz (sinusoidal)										A
I_{GM} ($t = 10 \mu\text{s}$)										V
V_{GRM} di/dt										A/ μs
$V_{DM} = V_{DRM}, I_G = 1 \text{ mA}, t_r = 0.5 \mu\text{s}, T_C = 110^\circ\text{C}$										A/ μs
t^2 [At T_C shown for $I_{T(RMS)}$]:										A ² s
t = 10 ms										A ² s
8.33 ms										A ² s
1 ms										W
P_{GM} (For 10 μs max.)										W
$P_{G(AV)}$ (Averaging time = 10 ms max.)										W
T_{sig}										$^\circ\text{C}$
T_C										$^\circ\text{C}$
T_T (During soldering for 10 s max.)										$^\circ\text{C}$